09/770,770

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	DB=USPT,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ		
L1	melting temperature$1 near5 mismatch$2 near5 probe$1 near5 hybridiz$	2	L1

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L1: Entry 1 of 2 File: USPT Jul 14, 1998

US-PAT-NO: 5780233
DOCUMENT-IDENTIFIER: US 5780233 A 5571637

TITLE: Artificial mismatch hybridization

DATE-ISSUED: July 14, 1998

INVENTOR-INFORMATION:

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APPL-NO: 8/ 659605 [PALM]
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INT-CL: [6] C12 Q 1/68, C07 H 21/04

US-CL-ISSUED: 435/6; 536/24.3, 536/24.33, 935/8, 935/77, 935/78
US-CL-CURRENT: 435/6; 536/24.3, 536/24.33

FIELD-OF-SEARCH: 435/6, 435/91.2, 435/91.5, 935/77, 935/78, 536/23.1, 536/24.3, 536/24.33

PRIOR-ART-DISCLOSED:

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ART-UNIT: 187
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ABSTRACT:

An improved nucleic acid hybridization process is provided which employs a modified oligonucleotide and improves the ability to discriminate a control nucleic acid target from a variant nucleic acid target containing a sequence variation. The modified probe contains at least one artificial mismatch relative to the control nucleic acid target in addition to any mismatch(es) arising from the sequence variation. The invention has direct and advantageous application to numerous existing hybridization methods, including, applications that employ, for example, the Polymerase Chain Reaction, allele-specific nucleic acid sequencing methods, and diagnostic hybridization methods.

5 Claims, 8 Drawing figures